

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A wavelength division multiplexer (WDM) assembly, comprising:

a plurality of optical fibers, a first fiber fusing with a second and third fibers and elongating to a length to form a first and second fusion regions at two different portions of the first fiber; the second fiber extended from the first fusion region further fusing with a fourth fiber and elongating to a length to form a third fusion region; and

at least one receiving sleeve receiving the first, second and third fusion regions therein, the receiving sleeve having a cylindrical shape;

wherein a complex light signal having a plurality of wavelengths is transmitted from the first optical fiber to the first fusion region, a predetermined wavelength is separated and goes into the second fusion region, and is further separated from the second fusion region to the first fiber, the other wavelengths are transmitted to the third fusion region via the second fiber, and are further separated from the third fusion region to the second fiber.

Claim 2 (canceled)

Claim 3 (currently amended): The WDM assembly as described in claim [[2]] 1, wherein either ~~end~~ or both ends of ~~said the~~ receiving sleeve [[is]] have glue applied to glue thereto for fixing corresponding of the optical fibers therein.

Claim 4 (currently amended): The WDM assembly as described in claim [[2]] 1, further ~~including a~~ comprising at least one shrink sleeve enclosing ~~said the~~

receiving sleeve therein.

Claim 5 (currently amended): The WDM assembly as described in claim 4, wherein either ~~end~~ or both ends of said ~~the~~ shrink sleeve ~~[[is]]~~ have glue applied to ~~glue~~ thereto for avoiding contamination.

Claim 6 (currently amended): The WDM assembly as described in claim 4, further ~~including~~ comprising an outer tube receiving the receiving and shrink sleeves therein.

Claim 7 (currently amended): The WDM assembly as described in claim 6, wherein ~~said the~~ outer tube has a through hole, ~~the~~ a diameter of the through hole is larger than ~~the~~ an exterior diameter of the receiving sleeve, and a space between the shrink sleeve and the outer tube is sealed with glue.

Claim 8 (currently amended): The WDM assembly as described in claim ~~[[2]]~~ 1, wherein the receiving sleeve is made of quartz material.

Claim 9 (currently amended): A wavelength division multiplexer (WDM) assembly, comprising:

a plurality of optical fibers, a first fiber fusing with a second and third fibers and elongating to a length to form a first and second fusion regions at two different portions of the first fiber, the second fiber extending from the first fusion region further fusing with a fourth ~~optical-fibers~~ fiber and elongating to a length to form a third fusion region, in such way, the plurality of optical fibers forming a plurality of fusion regions;

wherein a complex light signal having a plurality of wavelengths is transmitted from the first ~~optical~~ fiber to the first fusion region, a predetermined wavelength is separated and goes into the second fusion region, and is further separated from the second fusion region to the first fiber extending from the second region, the other wavelengths ~~is~~ are transmitted to the third fusion region via the second fiber, and a next predetermined wavelength is further separated from the

third fusion region to the second fiber extending from the third region, and the plurality of fusion regions ~~being~~ are capable of separating a plurality of wavelengths from the complex light signal.

Claim 10 (currently amended): The WDM assembly as described in claim 9, further including at least one receiving sleeve receiving ~~the plurality of fusion regions therein~~ the first, second and third fusion regions therein, the receiving sleeve having a cylindrical shape.

Claim 11 (currently amended): The WDM assembly as described in claim 10, wherein either ~~end~~ or both ends of said the receiving sleeve ~~[[is]]~~ have glue applied ~~to glue thereto~~ for fixing corresponding of the optical fibers therein.

Claim 12 (currently amended): The WDM assembly as described in claim 10, further ~~including~~ comprising at least one shrink sleeve enclosing the ~~assembled~~ receiving sleeve therein.

Claim 13 (currently amended): The WDM assembly as described in claim 12, wherein either ~~end~~ or both ends of said the shrink sleeve ~~[[is]]~~ have glue applied ~~to glue thereto.~~

Claim 14 (currently amended): The WDM assembly as described in claim 12, further ~~including~~ comprising an outer tube receiving ~~said the~~ assembled shrink sleeve therein.

Claim 15 (currently amended): The WDM assembly as described in claim 14, wherein ~~said the~~ outer tube has a through hole, ~~the a~~ diameter of the through hole is larger than ~~the an~~ exterior diameter of the receiving sleeve, and a space between the shrink sleeve and the outer tube is sealed with glue.

Claim 16 (currently amended): A method for producing a WDM assembly, comprising the steps of:

providing at least four optical fibers;

positioning a first and second optical fibers parallel to one another, firing to

fuse these two fibers and stretching them to a length sufficient to cause a light signal with ~~the~~ a predetermined wavelength to be coupled to the first optical fiber while light with ~~the other wavelength~~ wavelengths is coupled to the second optical fiber, the first optical fiber and second optical fiber thus together ~~form the~~ forming a first fusion region; region;

arraying a third optical fiber and the first optical fiber that extends from the first fusion region next to each other, fusing these two fibers and stretching them to a length sufficient to cause the light signal with the predetermined wavelength to be coupled to the first optical fiber while the light with ~~the other wavelengths~~ are is coupled to the third optical fiber, the first optical fiber and the ~~second~~ third optical fiber thus together ~~form the~~ forming a second fusion region;

fusing a fourth optical fiber and the second optical fiber that extends from the first fusion region and stretching them to a length sufficient to cause a light signal with a next predetermined wavelength to be coupled to the second optical fiber while light with ~~the other wavelengths~~ are is coupled to the fourth optical fiber, thus ~~form the~~ forming a third fusion region and ~~a plurality of fusion regions being formed in such way~~;

providing at least one receiving sleeve, the receiving sleeve receiving corresponding of the fusion regions therein;

providing ~~[[a]]~~ at least one shrink sleeve, the shrink sleeve enclosing said the receiving sleeve therein, ~~the~~ and cutting off excess optical fiber lengths that extend out of the shrink sleeve ~~being cut off~~; and

~~preving~~ providing an outer tube, ~~and~~ the outer tube receiving the shrink sleeve therein.

Claim 17 (currently amended): A method of claim 16, wherein either ~~end~~ or both ends of ~~said the~~ receiving sleeve ~~[[is]]~~ have glue applied ~~to glue~~ thereto after the fusion regions ~~[[is]]~~ are fixed thereinto.

Claim 18 (currently amended): A method of claim 16, wherein either ~~end~~ or both ends of ~~said the~~ shrink sleeve ~~[[is]] have glue applied to glue thereto~~ after the receiving sleeve is assembled thereinto.

Claim 19 (original): A method of claim 16, wherein a space between the shrink sleeve and the outer tube is sealed with glue after the shrink sleeve is assembled into the outer tube.

Claim 20 (new): A method of claim 16, wherein at least a fourth fusion region is formed by repeating appropriate parts of any one or more of the positioning, arraying, and fusing steps.